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(54) Title: RETINAL PIGMENT EPITHELIAL CELL CULTURES ON AMNIOTIC MEMBRANE AND TRANSPLANTATION

(57) Abstract: The present invention relates to a composition for implantation in the subretinal space of an eye, the composition including amniotic membrane, which may be cryopreserved human amniotic membrane, and a plurality of retinal pigment epithelial (RPE) cells or RPE equivalent cells present at the amniotic membrane. The amniotic membrane may be intact, epithelially denuded, or otherwise treated. The invention includes the use of amniotic membrane for the culturing of RPE cells thereon, forming a surgical graft for replacement of Bruch's membrane as a substrate, and for the transplanting of RPE cells to the subretinal space. The composition does not elicit immunological reactions to alloantigens or to RPE specific autoantigens; and exerts anti-inflammatory, anti-angiogenic, and anti-scarring effects. The invention includes methods and kits for making or using composites including amniotic membrane and RPE cells. Also disclosed is a device for harvesting RPE cells.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/31464

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61K 35/50; C12N 5/00
US CL : 424/582, 583, 93.7

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 424/582, 583, 93.7

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GB 2,110,531 A (THE EAST GRINSTEAD RESEARCH TRUST) 22 June 1983 (22.06.1983), see the entire document.	1-52

<input type="checkbox"/>	Further documents are listed in the continuation of Box C.	<input type="checkbox"/>	See patent family annex.
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"A"	document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"P"	document published prior to the international filing date but later than the priority date claimed		

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INTERNATIONAL SEARCH REPORT

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Continuation of B. FIELDS SEARCHED Item 3:
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search terms: amnion and retina\$